PETITION FOR VARIANCE CLERK OF THE BOARD SEFORE THE HEARING BOARD OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

21 NOV 23 A7:37

| PETITI | ONER: Southern California Edison – Pebbly Beach G | ENERATING STATION CASE N FACILITY ID: 4477 | NO: 1262-114 |
|--------|---|--|---|
| FACILI | TY ADDRESS: <u>1 Pebbly Beach Road, Avalon, CA 90704</u> on of equipment/site of violation; specify business/co | t orporate address, if different, ur | nder Item 2, below] |
| 1. | TYPE OF VARIANCE REQUESTED (more than one bo | ox may be checked; see Attachme | ent A, Item 1, before |
| | selecting) | | |
| | | EMERGENCY DEX PARTE | EMERGENCY |
| 2. | CONTACT: Name, title, company (if different than Fauthorized to receive notices regarding this Petition (no | | |
| | Kelly O'Donnell Henderson | | |
| | Senior Attorney, Southern California Edison | | ekinomonistani eng eng estamptanganisti |
| | 2244 Walnut Grove Ave. | | |
| | Rosemead, CA Zip 91770 | | Zip |
| | ☎ (626) 920-4747 | 2 () | Ext. |
| | Fax_() | Fax_() | |
| | E-mail_ Kelly.Henderson@sce.com | E-mail | |
| 3. | RECLAIM Permit Yes No | Title V Permit Yes | ☐ No |
| 4. | GOOD CAUSE: Explain why your petition was not filed (Required only for Emergency and Interim Variances; s | | uired public notice. |
| | SCE's Unit 15 is currently in compliance with its Title N not included in SCE's Title V permit. The SCAQMD dipermit review (it was issued on 2/9/18). Both the SCA until recently, when the SCAQMD discovered the issu application submitted on 3/9/21 (see Items 8, 9, and 1 10/14/21 meeting with SCAQMD staff, SCE evaluated Item 15 below). On 11/17/21 it was determined that no | d not evaluate Rule 1470 (c)(4)(A) AQMD and SCE were unaware of the during its review of SCE's Title Note 14 below). Upon being notified of the laways to bring Unit 15 into immed | during its last Title V the noncompliance V permit renewal he issue during a late compliance (see |

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If you require disability-related accommodations to facilitate participating in the hearing, contact the Clerk of the Board at least five (5) calendar days prior to the hearing.

[ALL DOCUMENTS FILED WITH CLERK'S OFFICE BECOME PUBLIC RECORD]

issue is still being discussed with the SCAQMD, SCE seeks to continue operation of Unit 15 in the interim and thus filed this variance petition two days later, on 11/19/21. If the variance is not granted, Unit 15 would not be able to continue operation without violating the Rule 1470 (c)(4)(A) diesel particulate matter (PM) limit for new/reconstructed engines. The shutdown of Unit 15 would result in an increase in oxides of nitrogen (NOx) and PM emissions because the remaining older and higher-emitting engines would have to be operated more to meet the residents' need for electric power on Catalina Island (see Items 17, 18, and 20 below).

5. Briefly describe the type of business and processes at your facility.

Pebbly Beach Generating Station (PBGS) is the sole provider of electric power to the residents of Santa Catalina Island. SCE is also the island's water and gas utility.

6. List the equipment and/or activity(s) that are the subject of this petition (see Attachment A, Item 6, Example #1). Attach copies of the Permit(s) to Construct and/or Permit(s) to Operate for the subject equipment. For RECLAIM or Title V facilities, attach *only* the relevant sections of the Facility Permit showing the equipment or process and conditions that are subject to this petition. You must bring the entire Facility Permit to the hearing.

| Equipment/Activity | Application/ Permit No. | RECLAIM Device No. | Date Application/Plan Denied (if relevant)* |
|--|----------------------------|-----------------------|---|
| Pebbly Beach Generating Station | 4477 | | |
| Diesel Internal Combustion Engine (ICE) - Unit 15 | 595203 | D42 | |
| Selective Catalytic Reduction (SCR) System - Unit 15 | 548965 | C58 | |
| CO Oxidation Catalyst - Unit 15 | 548965 | C82 | |

^{*}Attach copy of denial letter

7. Briefly describe the activity or equipment, and why it is necessary to the operation of your business. A schematic or diagram may be attached, in addition to the descriptive text.

Unit 15 is a two-stroke diesel internal combustion engine providing electric power to Santa Catalina Island. It is one of six diesel engines at PBGS. It has the largest generating capacity (2.8 MW) and lowest emissions, and thus is operated as the main baseload unit. SCE also operates a fleet of 23 microturbines (with a total capacity of 1.49 MW) and a battery (with a total capacity of 1 MW). While it is possible to operate the other five units in lieu of Unit 15, this would increase overall emissions, and PBGS would be unable to comply with the facility-wide NOx limit in its Title V permit.

| 8. | Is there a regular maintenance and/or inspection schedule for this equipment? Yes 🖂 No 🗌 | |
|----|---|-----|
| | If yes, how often: Daily visual inspections and maintenance as required. | _ |
| | Date of last maintenance and/or inspection The last major maintenance on the engine was a zero-time overhal | ıul |
| | <u>in late 2017.</u> | |

Describe the maintenance and/or inspection that was performed.

A zero-time overhaul consists of a complete engine overhaul and refurbishment. It is performed once an engine reaches 100,000 hours of operation. Unit 15's zero-time overhaul did not involve the emissions control system and was unrelated to the issue that is the subject of this petition (compliance with the Rule 1470 (c)(4)

| | (A) diesel PM limit for new/reconstructed engines). On 10/14/21, the SCAQMD informed SCE that SCAQMD staff should have reclassified Unit 15 as a new/reconstructed engine after the 2017 zero-time overhaul, but instead kept Unit 15's status as an in-use/existing engine. Rule 1470's PM emissions limit is lower for new/reconstructed engines (0.01 grams/bhp-hr) than for in-use/existing engines. Annual source testing of Unit 15 since 2018 indicates emissions in the range of 0.033-0.044 grams/bhp-hr. | | | |
|----------------|--|----------------------|----------------------------|--|
| 9. | List all District rules, and/or permit conditions [indicating the specific section(s) and subsection(s)] from which you are seeking variance relief (if requesting variance from Rule 401 or permit condition, see Attachment A). Briefly explain how you are or will be in violation of each rule or condition (see Attachment A, Item 9, Example #2). | | | |
| | Rule | | | Explanation |
| | Rule 1470(c)(4)(A) | diesel F | PM emissions limit of 0.01 | (therefore "new") engine, Unit 15 is subject to a 1 grams/bhp-hr. Annual source testing since range of 0.033-0.044 grams/bhp-hr. |
| 10. | Are the equipment or activities | subject to | this request currently ur | nder variance coverage? Yes 🗌 No 🔀 |
| | Case No. Date o | f Action | Final Compliance | Explanation |
| | n/a | | Date | |
| 11. | coverage? Yes N | lo 🛚 | | within the last six months) under variance |
| | Case No. Date o | fAction | Final Compliance Date | Explanation |
| | n/a | | Date | |
| 12. | |) of Violati lo ⊠ | on or Notice(s) to Comply | y concerning this equipment or activity within the |
| | If yes, you must attach a copy | | | |
| 13. | Have you received any comple within the last six months? | Yes | the public regarding the o | operation of the subject equipment or activity |
| | If yes, you should be prepared | to preser | nt details at the hearing. | |
| 14. | Explain why it is beyond your reasonable control to comply with the rule(s) and/or permit condition(s). Provide specific event(s) and date(s) of occurrence(s), if applicable. | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| I YOU M | AV ATTACH ADDITIONAL PAGES IE I | VECESSARY | v 1 | PAGE 3 OF 10 |

As currently configured, Unit 15 cannot meet the 0.01 g/bhp-hr PM limit in Rule 1470(c)(4)(A) for new/reconstructed engines. Further add-on controls would be required, namely a diesel particulate filter (DPF). A DPF is a device designed to remove diesel PM or soot from an engine's exhaust gas. The device attaches directly to the emissions exhaust stack and generates added back pressure to the engine. Per the manufacturer specifications for Unit 15, the maximum allowable back pressure is 5" water column (WC). Because of the significant volume of Selective Catalytic Reduction (SCR) and carbon monoxide (CO) catalyst beds already present in the exhaust gas stream to control NOx and CO emissions, there is limited back pressure available to accommodate a subsequent control device. With the catalyst beds fully cleaned, Unit 15 has a margin of 2-2.5" water column (WC), while a DPF would require at least 5" WC. Adding a DPF would therefore exceed the back pressure limit and could damage the engine, triggering a significant safety issue. Removing a portion of the SCR or CO catalyst to accommodate a DPF is not feasible because all those catalysts are needed for NOx and CO emissions compliance. Therefore, it is not technically feasible for Unit 15 to operate with a DPF while also maintaining compliance with NOx and CO permit limits.

15. When and how did you first become aware that you would not be in compliance with the rule(s) and/or permit condition(s)? Provide specific event(s) and date(s) of occurrence(s).

SCE first became aware of the Rule 1470 issue during a conference call with SCAQMD on 10/14/21. During the meeting, SCAQMD inquired if SCE could quickly install a DPF on Unit 15 and subsequently perform a source test to demonstrate compliance with Rule 1470. If so, then the PBGS Title V permit renewal could simply be issued with a new condition enforcing the Rule 1470 limit. SCE agreed to investigate this possibility and started reaching out to DPF vendors and engine manufacturers on 10/15/21. This included EMD (the manufacturer of the current Unit 15), Cummins (who is contracted to provide new replacement Tier 4 engines to PBGS), and Johnson-Matthey (the manufacturer of Unit 15's aftertreatment controls). At the same time, SCE began reviewing exhaust pressure trends and SCR/CO catalyst back pressure effects on engine performance. Each vendor ultimately expressed the belief that a DPF would be infeasible due to the limited back pressure available at Unit 15. A meeting was held with SCAQMD on 11/3/21 to inform them of the technical limitations of installing a DPF. SCE brought up the possibility of filing for a variance, and SCAQMD did not object to this idea if all other compliance options were exhausted. SCE also reevaluated Unit 15's status as a "reconstructed" engine, which was based on the 2017 cost estimates and work proposals from the zero-time overhaul (which exceeded 50% of the cost associated with a new unit). SCE recently reevaluated the SCAQMD's analysis using actual invoices and receipts instead of the estimates available in 2017. This after-the-fact analysis did not change the SCAQMD's recent determination that Unit 15 should have been classified as a "new" engine after the 2017 overhaul. After an internal meeting on 11/17/21 in which no other options to stay in compliance were identified, SCE initiated the variance preparation process. This petition was filed on 11/19/21.

16. List date(s) and action(s) you have taken since that time to achieve compliance.

In addition to the actions described in Item 15 above, filing this petition for an interim and regular variance.

| 17. | What would be the harm to your business during and/or after the period of the variance if the variance were not |
|-----|---|
| | granted? |

Economic losses: \$ Unknown

Number of employees laid off (if any): None

Provide detailed information regarding economic losses, if any, (anticipated business closure, breach of contracts, hardship on customers, layoffs, and/or similar impacts).

If the variance is not granted, the SCAQMD could issue a Notice of Violation (NOV) and impose a fine as a result of noncompliance with the Rule 1470 (c)(4)(A) diesel PM limit. Continued operation of Unit 15 would be a continuing violation of that limit.

If the variance were not granted, Unit 15 would have to be immediately shut down until it is replaced as part of the PBGS Repower Project (currently scheduled for Q4 of 2023). As mentioned previously, Unit 15 is the largest, most efficient engine and has significantly lower NOx emissions than the remaining five units. Therefore, shutting Unit 15 down would result in increased NOx emissions from the remaining five units. Without Unit 15, PBGS would also be unable to comply with either the facility-wide NOx emission limit in its Title V permit or the NOx emission cap in Proposed Amended Rule 1135. This could result in adverse impacts to air quality and NOVs and fines from the SCAQMD.

18. Can you curtail or terminate operations in lieu of, or in addition to, obtaining a variance? Please explain.

Although it is possible to operate the other five units in lieu of Unit 15, this would increase overall emissions, and PBGS would be unable to comply with the facility-wide NOx limit in its Title V permit.

19. Estimate excess emissions, if any, on a daily basis, including, if applicable, excess opacity (the percentage of total opacity above 20% during the variance period). If the variance will result in no excess emissions, insert "N/A" here and skip to No. 20.

| | (A) | (B) | (C)* |
|--------------------------|--|---|---|
| Pollutant | Total Estimated Excess Emissions (lbs/day) | Reduction Due to Mitigation (lbs/day) | Net Emissions After Mitigation (lbs/day) |
| PM (vs. Rule 1470 limit) | 5.98 | 0 | 5.98 |
| PM (vs. other units) | none | none | none |

^{*} Column A minus Column B = Column C

| Excess | Opacity: | 0 | 1 | ٥ |
|--------|----------|---|---|---|
| | | | | |

20. Show calculations used to estimate quantities in No. 19, **or** explain why there will be no excess emissions.

The table below lists PM emissions from all PBGS six units. Note that Unit 15 is required to conduct annual source tests for PM, but the other five units are not. The only available results for the other five units are from informational tests performed in 2010.

| Unit | Test | Date | Pollutant | g/bhp-hr |
|------|---------------------------------------|------------|-----------|----------|
| 7 | | 11/17/2010 | Diesel PM | 0.017 |
| 8 | Informational Particulate Annual test | 11/18/2010 | Diesel PM | 0.037 |
| 10 | | 3/23/2010 | Diesel PM | 0.062 |
| 12 | | 11/16/2010 | Diesel PM | 0.016 |
| 14 | | 11/15/2010 | Diesel PM | 0.063 |
| | | 7/13/2018 | Diesel PM | 0.043 |
| 15 | Annual test | 7/23/2019 | Diesel PM | 0.035 |
| 15 | Annual test | 7/21/2020 | Diesel PM | 0.044 |
| | Annual test | 4/28/2021 | Diesel PM | 0.033 |

In comparing Unit 15 to the other five units, the average results are almost identical. The average emissions from the four most recent Unit 15 tests are **0.038** g/bhp-hr, while the average emissions from the five other units are **0.039** g/bhp-hr. If SCE's variance petition for Unit 15 is denied, SCE would be forced to operate the other five units more to replace its output. In that case, the average PM emissions (as well as NOx emissions) would increase. Therefore, PM and NOx emissions would be lower if Unit 15 were to continue operation under a variance.

When compared to the Rule 1470 limit of 0.01 g/bhp-hr, the calculation is as follows:

Unit 15 emissions = 0.039 g/bhp-hr
- Rule 1470 limit = 0.01 g/bhp-hr
Excess emissions = 0.029 g/bhp-hr

Unit 15 is rated at 3900 hp. For 24 hours/day operation, the excess emissions are:

 $0.029 \text{ g/bhp-hr} \times 3900 \text{ hp} \times 24 \text{ hr/day} \div 453.6 \text{ g/lb} = 5.98 \text{ lbs/day}$

21. Explain how you plan to reduce (mitigate) excess emissions during the variance period to the maximum extent feasible, or why reductions are not feasible.

Mitigation is not feasible in this case because Unit 15's operation is vital to maintain compliance with the facility's Title V permit. As discussed previously, add-on control devices are not technically feasible.

22. How do you plan to monitor or quantify emission levels from the equipment or activity(s) during the variance period, and to make such records available to the District? Any proposed monitoring does not relieve RECLAIM facilities from applicable missing data requirements.

The average of the previous four annual source tests will be used as the PM emission factor (0.039 g/bhp-hr). Emissions will then be quantified using total engine run hours, which are recorded by the facility CEMS.

23. How do you intend to achieve compliance with the rule(s) and/or permit condition(s)? Include a detailed description of any equipment to be installed, modifications or process changes to be made, permit conditions to be amended, etc., dates by which the actions will be completed, and an estimate of total costs.

| | Because compliance with the Rule 1470 PM limithe engine will be replaced with an EPA Tier 4 F Repower Project. The replacement engine will be new/existing engines. The permit application for | inal co e con | ompliant engine in Q4.2 opliant with the Rule 14 | 2023 as part of the PBGS 70 (c)(4)(A) limit for |
|---------------------------|--|------------------|---|--|
| 24. | State the date you are requesting the variance to achieve final compliance: Q1 2024. If the regular variance is to extend beyond one ye specifying dates or time increments for steps need. | ar, yo | u must include a Sch e | dule of Increments of Progress, |
| | of Increments of Progress (see Attachment A, Iter | m 24, | Example #3). | oee District (Aule 102 for definition |
| | List Increments of Progress here: On-site construction will be initiated by Normal Contraction will be completed be Engine certification and testing will be contraction. | y Mar | ch 2024. | |
| 25. | List the names of any District personnel with whom variance petition or any related Notice of Violation | n facil or No | ity representatives hav stice to Comply. | e had contact concerning this |
| | Tom Liebel | | Extx255 | 4 |
| | Rizaldy Calungcagin | | Extx231 | 5 |
| | Name Company The undersigned, under penalty of perjury, states therein set forth, is true and correct. | | | Title |
| | | at | Rosemead | , California |
| | Signature SMAC | | Casey Scott Print Name | |
| | Signature | | Fillit Name | |
| - | Title: Senior Advisor, Air Quality | | | |
| 26. individ followi | | ipts cr | | e 303(h)], you must complete the |
| | The petitioner is a) an individual, or an officer, partner or owner of the petition authorized to make the representations | | | red agent of the petitioner |
| | If you selected 1a, above, skip item 2. | | | |
| | 2. The petitioner isa) □ a business that meets the following defi | nition | of Small Business as s | eet forth in District Rule 102: |
| [YOU N | AY ATTACH ADDITIONAL PAGES IF NECESSARY] | | | PAGE 7 OF 10 |

SMALL BUSINESS means a business which is independently owned and operated and meets the following criteria, or if affiliated with another concern, the combined activities of both concerns shall meet these criteria:

- (a) the number of employees is 10 or less; AND
- (b) the total gross annual receipts are \$500,000 or less or
- (iii) the facility is a not-for-profit training center.

-OR-

- b) ☐ an entity with total gross annual receipts of \$500,000 or less.
- 3. Therefore, I believe the petitioner qualifies for reduced fees for purpose of filing fees and excess emission fee calculations, in accordance with Rule 303(h).

I declare under penalty of perjury that the foregoing is true and correct.

| Executed on | , at | | , California |
|-------------|------|------------|--------------|
| Signature | | Print Name | |
| Title | | - | |

ATTACHMENT A

ITEM 1

Type of Variance Requested:

- (a) **SHORT:** If compliance with District rule(s) can be achieved in <u>90 days or less</u>, request a short variance. (Hearing will be held approximately 21 days from date of filing--10-day posted notice required.)
- (b) **REGULAR:** If compliance with District rule(s) will take <u>more than 90 days</u>, request a regular variance. If the variance request will extend beyond one year, you <u>must</u> include a specific detailed schedule of increments of progress [see Page 8, No. 24] under which you will achieve final compliance. (Hearing will be held approximately 45 days from date of filing--30-day published notice required.)
- (c) **EMERGENCY:** If non-compliance is the result of an unforeseen emergency, such as a sudden equipment breakdown, power failure, or accidental fire, you may request an emergency variance. You may request an ex parte emergency variance in addition to an emergency variance. **An emergency variance cannot be granted for more than 30 days.** (Hearing will be held within 2 working days from the date of filing, whenever possible, excluding Mondays, weekends, and holidays.) If you request an emergency variance, you must answer No. 4 on page 1.
- (d) **EX PARTE EMERGENCY:** If variance coverage is required on a weekend or when the Board is not in session, and you cannot wait until an emergency variance hearing can be held, you may request an *ex parte* emergency variance. An *ex parte* emergency variance will be granted or denied solely on the information contained in the petition and the District's response to the petition. Under most circumstances, an *ex parte* emergency variance will remain in effect only until a hearing can be held. If you request an *ex parte* variance, you must answer No. 4 on page 1.
- (e) INTERIM: If you require immediate relief (other than for emergencies) to cover the time until a short or regular variance hearing can be held, request an interim variance. If you request an interim variance, you must also request a short or a regular variance on the same petition. (Hearing will be held approximately 2 working days from date of filing, whenever possible, excluding Mondays, weekends and holidays.) If you request an interim variance, you must answer No. 4 on page 1.

ITEM 4

GOOD CAUSE: The Hearing Board is required to provide public notice of variance hearings, as the public has a right to attend and testify at such hearings. In order for the Hearing Board to hold an Interim, *Ex Parte* Emergency or Emergency Variance hearing without the required public notice, a petitioner must present facts which will support a determination by the Board that "good cause" exists to hear a variance without notifying the public about the variance and providing the public with an opportunity to present evidence concerning the variance.

ITEM 6

Example #1:

| Equipment/Activity | Application/ Permit No. | RECLAIM Device No. | Date Application/Plan Denied (if relevant)* |
|--|----------------------------|-----------------------|---|
| Tenter frame | | D32 | |
| Chrome-plating tank | M99999 | | |
| Bake oven | 123456 | | |
| Create special effects (fog) | N/A | N/A | N/A |
| Mfg., sale, distribution, use of non-compliant coating | N/A | N/A | 12/10/95 |

ITEM 9

- a) If you are requesting relief from Rule 401 and the excess opacity during the variance period will reach or exceed 40%, you should also request relief from California Health and Safety Code Section 41701.
- b) If you are requesting relief from a permit condition(s), you should also request relief from the rule requiring compliance with conditions of the permit: 202(a), (b) or (c) Temporary Permit to Operate; 203(b) Permit to Operate; 2004(f)(1) RECLAIM Permit; 3002(c) Title V Permit.

Example #2:

| Rule | Explanation |
|---|--|
| 404(a) | tenter frame is vented to damaged air pollution control equipment |
| 2004 (f)(1) [Condition No. 28-2 of Facility P/O No. 099999] | source test cannot be conducted as required until new ESP is installed |
| 1113(c)(2) | petitioner manufactures and sells clear wood finishes with VOCs in excess of 350 grams per liter |
| 401(a) & California H&S Code Section 41701 | Opacity will exceed 45%. |

ITEM 24

Example #3:

Sample Schedule of Increments of Progress

- Permit application(s) will be submitted to the District by [date].
- Contracts for the purchase of emission control systems will be awarded by [date].
- On-site construction will be completed by [date].

(Petition for Variance: Revised February 22, 2011)

| English | "If you require a language interpreter in order to participate in the hearing, contact the |
|-----------|---|
| | Clerk of the Board at least five (5) calendar days before your hearing at 909-396-2500 or |
| | by e-mail at <u>clerkofboard@aqmd.gov</u> . Specify the case name and number, hearing date, |
| г. | and the language for which you are requesting an interpreter." الگر برای شرکت در جلسه استماع به مترجم نیاز دارید, حد اقل پنج (5) روز تقویمی قبل از جلسه استماع , با منشی هینت توسط شماره تلفن |
| Farsi | اکر برای سرکت در جسته استفاع به مرجم نیاز دارید, که این پنج (د) روز تعویمی مین از جسته استفاع , به مسلی مینت توسط سعاره تعق 909-396-396 یا بوسیله نامه الکترونیکی با نشانی clerkofboard@aqmd.gov تماس بگیرد. نام پرونده و شماره آن, تاریخ |
| | جلسه استماع و زیانی را که برای آن مترجم درخواست کرده اید. مشخص کنید" |
| Arabic | "إذا كنت في حاجةً لمترجم من أجل المشاركة في جلسة الاستماع، اتصل بكاتب المحكمة قبل موعد جلسة الاستماع بخمسة (5) أيام على هاتف 2500- |
| | . هدد اسم ورقم القضية و تاريخ الاستماع واللغة التي تريد في 396 <u>clerkofboard@aqmd.gov-</u> 909 أو بالبريد الإلكتروني على مترجم لها.'' |
| Armenian | "Ունկնդրության մասնակցելու քամար, եթե թարգմանչի կարիքն ունենաք, նախքան ձեր ունկնդրությունը, ամենաքիչն ճինգ (ճ) օրացույցային օրից առաջ կապվեք քանձնախմբի քարտուղարի քետ, 909–396–2600 քեռախոսաքամարով կամ ելեկտ՝ նամակով քետևյալ քասցեով <u>clerkofboard@agmd.gov</u> լ Նչեք գործի անունն և քամարն, ունկնդրության թվականը, և լեզուն, որի քամար թարգմանիչ եք ցանկանում" |
| Vietnames | "Nếu quý vị cần Thông Dịch Viên cho buổi điều trần, xin vui lòng điện-thoại cho Thư Ký Hội Đồng tại số |
| e | 909-396-2500 trễ nhất là năm [5] ngày, không tính hai ngày Thứ Bảy và Chủ Nhật, trước buổi điều trần |
| | hoặc gửi điện thư đến $\frac{clerkofboard@aqmd.gov}{}$. Nhớ ghi rõ tên và số hồ sơ, ngày điều trần, và ngôn |
| | ngữ quý vị cần có người để thông dịch." |
| Chinese | 如果你要求翻譯來協助你參加聽證會,請在你的聽證會前至少提前五天(5個日曆日)打電 |
| | 話到909-396-2500或發電子郵件到 <i>clerkofboard@agmd.gov</i> |
| | 與局裏的辦事人員聯絡。並且明確説明你的案子的名稱和號碼,聽證日期,以及你要求的 |
| | 翻譯的語種。 |
| Japanese | 公聴会(ヒアリング)に参加するために通訳が必要な場合、少なくとも5日前まで |
| | に事務局 (Clerk of the Board) にご連絡ください。電話でのご連絡は |
| | 909-396-2500、 ϵ -メールでのご連絡は <u>clerkofboard@aqmd.gov</u> . |
| | までお願いします。その際、案件名 (case name) と案件番号 (case number)、 |
| | ヒアリングの日付、通訳が必要な言語を特定して下さい。 |
| Korean | "만약 귀하나 귀하의 증인들이 심리에 참여하기 위해 통역사가 필요하시면, |
| | 심리일 5일 전까지 기관부서의 서기에게 909-396-2500으로 연락하시거나. |
| | clerkofboard@aqmd.gov 로 연락 하십시오. |
| | 통역이 필요하신 사건의 이름, 심리날짜, 그리고 언어를 정확하게 말씀해 |
| | 주십시오." |
| Spanish | Si usted requiere un intérprete para poder participar en la audiencia, favor de comunicarse |
| 1 | con el Secretario de la Junta cuando menos cinco (5) días hábiles antes de su audiencia al |
| | teléfono (909) 396-2500 ó por correo electrónico al <i>clerkofboard@aqmd.gov</i> . Especifique |
| | el nombre y el número de su causa, la fecha de la audiencia y el idioma del cual está |
| | solicitando el intérprete. |
| Tagalog | "Kung kailangan ninyo nang interpreter sa Pilipino para makasali kayo sa pagdinig sa kaso, tumawag lang po kayo sa Clerk of the Board sa numero 909-396-2500 or kung hindi mag-email kayo sa |
| | email <u>clerkofboard@aqmd.gov</u> . Kailangan na tumawag kayo sa loob nang limang araw (5 days) bago ang inyong hearing date at ibigay and inyong pangalan at case number, araw nang inyong pagdinig sa kaso at inyong gusto na may lenguahe na interpreter". |
| Thai | หากคุณต้องการล่ามในการขึ้นคาล ให้ติคต่อเจ้าหน้าที่ ล่วงหน้าอย่างน้อย 5 วันก่อนวันขึ้นคาล โดยติคต่อที่เบอร์โทร 909-396-2500 หรือโดยe-mailที่ |
| | Third residue of Third residue in Michigan Control (1975) |

| clerkofboard@agmd.gov ให้บอกชื่อและหมายเลกของคดี พร้อมทั้งวันเวลาในการขึ้นศาล และระบุภาษาที่คุณต้องการล่าม | lerkofboard@aqmd.gov ให้บอกชื่อและหมายเลกของคดี พร้อมทั้งวันเวลาในการขึ้นศาล และระบุภาษาที่คุณต้องการล่าม |
|--|---|
| clerkotboard@aqmd.gov ให้บอกชื่อและหมายเลกของคดี พร้อมทั้งวันเวลาในการขึ้นศาล และระบุภาษาที่คุณต้องการล่าม | .erkoiboard@aqmd.gov ให้บอกชื่อและหมายเลกของคดี พร้อมทั้งวันเวลาในการขึ้นศาล และระบุภาษาที่คุณต้องการล่าม |



Title Page

Facility ID:

004477

Revision #: 49 Date: February 09, 2018

FACILITY PERMIT TO OPERATE

SO CAL EDISON CO 1 PEBBLY BEACH RD AVALON, CA 90704

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Wayne Mastri Executive Officer

Lak Tisopulos, Ph.D., P.E. Deputy Executive Officer

Engineering and Permitting

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Date: February 09, 2018

FACILITY PERMIT TO OPERATE SO CAL EDISON CO

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Section H Page Facility ID: 00 Revision #:

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FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

| Equipment | ID No. | Connected To | RECLAIM Source Type/ Monitoring Unit | Emissions* And Requirements | Conditions |
|--|-----------|-----------------|--|--|--|
| Process 1: INTERNAL CO | MBUS | STION | general designation | | |
| System 1: POWER GENE | RATIO | ON | | | |
| INTERNAL COMBUSTION ENGINE, LEAN BURN, NON-EMERGENCY, UNIT NO. 15, DIESEL FUEL, EMD, MODEL 16-710G4B, TWO CYCLE, WITH AFTERCOOLER, TURBOCHARGER, 3900 HP WITH A/N: 595203 Permit to Construct Issued: 01/05/18 | D42 | | NOX: MAJOR SOURCE** | CO: 23 PPMV DIESEL (8) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1) -BACT, 12-6-2002; 40CFR 63 Subpart ZZZZ, 1-30-2013]; CO: 250 PPMV DIESEL (5) [RULE 1110.2, 2-1-2008; RULE 1110.2, 6-3-2016]; NOX: 2.13 lbs/net MWH DIESEL (5) [RULE 2009.1, 5-11-2001]; NOX: 51 PPMV DIESEL (4) [RULE 2005, 10-15-1993; RULE 2005, 4-9-1999]; PM: (9) [RULE 404 2-7-1986]; ROG: 30 PPMV DIESEL (5) [RULE 1110.2, 2-1-2008; RULE 1110.2, 6-3-2016] | A63.1, A63.2, A99.1, A195.7, A195.9, A195.10, D29.2, D29.3, D29.5, D29.6, D323.2, E73.1 E193.1, H23.1 H23.5, K40.2, K171.1 |
| GENERATOR, 2800 KW | | | | | |

(3) Denotes RECLAIM concentration limit (4)

(5) (5A) (5B) Denotes command and control emission limit (6)

(7) Denotes NSR applicability limit

(9) See App B for Emission Limits

(2) (2A) (2B) Denotes RECLAIM emission rate

Denotes BACT emission limit
Denotes air toxic control rule limit

(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)

(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

^{(1) (1}A) (1B) Denotes RECLAIM emission factor



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FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: DEVICE ID INDEX

The following sub-section provides an index to the devices that make up the facility description sorted by device ID.



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FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: DEVICE ID INDEX

| Device Index For Section H | | | | |
|----------------------------|--------------|---------|---------|--------|
| Device ID | Section H Pa | ige No. | Process | System |
| D42 | | 1 | 1 | 1 |

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FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

FACILITY CONDITIONS

- F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:
 - (a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or
 - (b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

[RULE 401, 3-2-1984; RULE 401, 9-11-1998]

F14.1 The operator shall not use fuel oil containing sulfur compounds in excess of 0.05 percent by weight.

[RULE 431.2, 5-4-1990; RULE 431.2, 9-15-2000]

F14.2 The operator shall not purchase fuel oil containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

This condition shall become effective on or after June 1, 2004.

[RULE 431.2, 9-15-2000]

F67.1 The facility operator shall comply with all terms and conditions specified in the Settlement Agreement between SCE and SCAQMD dated March 2009 and Microturbine Site Agreement between SCE and SCAQMD dated November 2007, including the following:.

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FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

- a) Ensure that the battery or at least 50% of the operating capacity of the micro-turbines, or both be integrated with the generating system and in operable condition at all times, except during any necessary maintenance and repairs or during other unforseen circumstances that would prevent such integration or operable condition
- b) Ensure that at least 635,000 kW of power is generated by the micro-turbines each calendar year, unless there are breakdowns or other intervening circumstances beyond the operator's control, and the operator promptly takes steps to repair the conditions causing the reduction in the amount of electricity that the micro-turbines are able to produce

[H&S 44300, 7-1-1988]

DEVICE CONDITIONS

A. Emission Limits

A63.1 The operator shall limit emissions from this equipment as follows:

| CONTAMINANT | EMISSIONS LIMIT |
|-------------|---|
| ROG | Less than or equal to 11.2 LBS PER DAY |
| SOX | Less than or equal to 32.9 LBS PER DAY |
| PM10 | Less than or equal to 44.4 LBS PER DAY |
| CO | Less than or equal to 206.1 LBS PER DAY |

The limits for ROG, CO, and PM10 shall be verified using the latest source test results for each pollutant in lbs/hr multiplied by actual number of hours the unit has operated each day

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition: D42]



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FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The operator shall limit emissions from this equipment as follows: A63.2

| CONTAMINANT | EMISSIONS LIMIT |
|-------------|---|
| PM | Less than or equal to 5.32 TONS IN ANY ONE YEAR |

The limit shall be verified by using the results from the latest source test for PM emissions and either the total annual fuel use or the total annual hours of operation for the unit. The yearly emission limit shall be defined as a period of twelve (12) consecutive months determined on a rolling basis with a new 12 month period beginning on the first day of each calendar month

[RULE 1401, 3-7-2008]

[Devices subject to this condition: D42]

The 51 PPM NOX emission limit(s) shall not apply during start up or shutdown periods. A99.1 Each start up shall not exceed 60 minutes and each shutdown shall not exceed 15 minutes. There shall be no more than 720 start ups per year. NOx emissions for the 60 minutes which includes a start up shall not exceed 25 lbs.

[RULE 2005, 5-6-2005]

[Devices subject to this condition: D42]

A195.7 The 2.13 LBS/MW-HR NOX emission limit(s) is averaged over 1 year.

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FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

- 1. To demonstrate compliance with the Nox emission rate for Device D42, the facility permit holder shall comply with the following:.
- (a) Determine the NOx emissions from the device pursuant to Rule 2012 including any required data substitution.
- (b) For each quarter starting from the fourth quarter of compliance year 2001, report the quarterly NOx emissions and the energy produced in megawatts-hour for the quarter from this device. The report shall be filed along with the Quarterly Certificate of Emission Report (QCER) as required by Rule 2004.
- 2. The SCR control equipment shall be capable of achieving a NOx reduction of at least 70%.

[RULE 2004, 5-11-2001; RULE 2009.1, 5-11-2001]

[Devices subject to this condition: D42]

A195.9 The 51 PPM NOX emission limit(s) is averaged over 60 minutes at 15 percent O2, dry.



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FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The 51 PPM 60 minute average (One-Hour Block Average) NOX emissions Limit is calculated by averaging four consecutive valid 15-minute averaging periods produced by the CEMS in a one-hour period at 15 percent O2, dry. At least 1 minute of valid data is required for each 15-minute period.

An exemption from the 51 ppm One-Hour Block Average NOx Limit shall apply no more than 5 times per calendar year, provided that a 40 ppm, at 15 percent O2, dry, Three-Hour Block Average NOx Limit is met.

The 40 ppm Three-Hour Block Average NOx Limit is calculated by averaging 12 consecutive valid 15-minute averaging periods in a three-hour period that includes the one-hour period during which the 51 ppm One-Hour Block Average is exceeded. At least 1 minute of valid data is required for each 15-minute period. If the daily calibration check occurs during any of the twelve periods (periods 1-12), that period may be excluded and a 13th 15-minute period may be added (period 0 or 13).

All other valid 15 minute average periods included within the definitions of the One-Hour Block Average NOx Limit and the Three-Hour Block Average NOx Limit, including periods within those definitions with data substitution, shall be used to calculate the averages.

Notwithstanding the clock-hour requirements of Rule 2012, or the definition of One-Hour Block Average NOx Limit in this condition, the NOx emissions from the unit shall comply with BACT Limit for the 60 minute period beginning after the end of each start up, and for the 60 minute period beginning 15 minutes before the end of each shutdown. The average shall be based on four valid 15-minute periods, with at least 1 minute of valid data in each period.

The operator shall also show compliance with the BACT Limit for the overlapping clock-hour average in a start up or shutdown situation.

The operator shall keep minute data for at least 60 minutes after the end of a start up and at least 60 minutes prior to the start of a shutdown, and use the average of the data to show compliance with the 60-Minute BACT Limit averaged as defined above. Any data substitution during these 60 minute periods shall be used in the



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FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

calculation of the average.

[RULE 2005, 5-6-2005]

[Devices subject to this condition : D42]

A195.10 The 23 PPMV CO emission limit(s) is averaged over 1 hour at 15%O2, dry.

This limit shall take effect no later than May 3, 2013..

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; 40CFR 63SubpartZZZZ, 3-9-2011]

[Devices subject to this condition: D42]

D. Monitoring/Testing Requirements

D29.2 The operator shall conduct source test(s) for the pollutant(s) identified below.

| Pollutant(s) to be tested | Required Test Method(s) | Averaging Time | Test Location |
|---------------------------|-------------------------|----------------|------------------------|
| NH3 emissions | District method 207.1 | 1 hour | Outlet of the SCR |
| | and 5.3 or EPA method | | serving this equipment |
| | 17 | | |



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FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The test shall be conducted at least quarterly during the first 12 months of operation of the SCR, and at least annually thereafter.

The test shall be conducted to determine the NH3 emissions at the outlet using the specified method measured over a 60 minute averaging time period. The NOx concentration , as determined by the CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable, a test shall be conducted to determine the NOx emissions using District method 100.1.

The test shall be conducted when the equipment is operating at 80 percent load or greater.

The test results shall be submitted to the SCAQMD within 45 days after the test date.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition: D42]

D29.3 The operator shall conduct source test(s) for the pollutant(s) identified below.

| Pollutant(s) to be tested | Required Test Method(s) | Averaging Time | Test Location |
|---------------------------|--------------------------|----------------|------------------------|
| ROG emissions | Approved District method | 1 hour | Outlet of the SCR |
| | | | serving this equipment |
| PM emissions | District method 5.2 | 1 hour | Outlet of the SCR |
| | | | serving this equipment |
| CO emissions | District method 100.1 | 1 hour | Outlet of the SCR |
| | 1 | ı | serving this equipment |



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FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The test shall be conducted at least once every year for PM and ROG, and at least once every 2 years for CO, or in accordance with Rule 1110.2, whichever is more stringent

The test shall be conducted to determine compliance with the A63.1 limits. Test results in lbs/hr or lbs/1000 gallons shall be used in conjunction with either the hours of operation or the fuel use data to calculate the daily and annual emissions of these pollutants

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate (gph), the flue gas flow rate, and the engine generating output in MW. The test shall be conducted when the unit is operating at 80% of full load or greater (less than full load test results will be prorated to full load).

The NOx concentration, as determined by the CEMS, shall be simultaneously recorded during the ROG and CO test. If the CEMS is inoperable, a test shall be conducted to determine the NOx emissions using District Method 100.1 measured over a 60 minute averaging time period

The test shall be conducted in accordance with AQMD approved protocol. The protocol shall be submitted to the AQMD engineer no later than 45 days before the proposed test date and shall be approved by the AQMD before the test commences. The test protocol shall include the proposed operating conditions of the turbine during the tests, the identity of the testing lab, a statement from the lab certifying that it meets the criteria of R304, and a description of all sampling and analytical procedures

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: D42]

D29.5 The operator shall conduct source test(s) for the pollutant(s) identified below.

| Pollutant(s) to | Required Test Method(s) | Averaging Time | Test Location |
|-----------------|-------------------------|----------------|---------------|
| be tested | I | 1 | 1 |



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FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

CO emissions | EPA Test Method 10 or | 1 hour | Outlet of the SCR | District Method 100.1 | Serving this equipment

The test shall be conducted at least once every 3 years or 8,760 operating hours, whichever comes first

The initial test shall be performed no later than May 3, 2013.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; 40CFR 63SubpartZZZZ, 3-9-2011]

[Devices subject to this condition: D42]

D29.6 The operator shall conduct source test(s) for the pollutant(s) identified below.

| Pollutant(s) to be tested | Required Test Method(s) | Averaging Time | Test Location |
|---------------------------|-------------------------|----------------|------------------------|
| NOX emissions | District method 100.1 | 1 hour | Outlet of the SCR |
| | • | ' | serving this equipment |

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FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The test shall be conducted to determine compliance with the applicable limits in 40 CFR 60 Subpart IIII, which are as follows:

17.0 g/kW-hr when maximum test speed is less than 130 rpm.

 $45.0 \times N^{-0.20}$ when maximum test speed is at least 130 but less than 2000 rpm, where N is the maximum test speed of the engine in revolutions per minute.

9.8 g/kW-hr when maximum test speed is 2000 rpm or more.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate (gph), the flue gas flow rate, the engine generator output in kW, and the engine speed in rpm.

The test shall be conducted within 180 days after the work on the engine is completed and after confirmation that the unit was in fact reconstructed based on actual invoices.

The test results shall be submitted to the SCAQMD within 45 days after the test date.

[40CFR 60 Subpart IIII, 7-7-2016]

[Devices subject to this condition: D42]



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FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

D323.2 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a quarterly basis, at least, unless the equipment did not operate during the entire quarterly period. The routine quarterly inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

- 1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or
- 2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions;
- 3). Date and time visible emission was abated; and
- 4). All visible emission observation records by operator or a certified smoke reader.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]



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Date: February 09, 2018

FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition: D42]

E. Equipment Operation/Construction Requirements

E73.1 Notwithstanding the requirements of Section E conditions, the operator may, at his discretion, choose not to use urea injection during start ups when the exhaust temperature at the inlet of the SCR reactor is less than 550 Deg F, not to exceed 1 hour:

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 402, 5-7-1976]

[Devices subject to this condition: D42]

E193.1 The operator shall construct, operate, and maintain this equipment according to the following specifications:

In accordance with all mitigation measures, as well as all design and operational representations, stipulated in the CEQA document that was prepared for this project by the South Coast AQMD (SCH No. 2003031050)

[CA PRC CEQA, 11-23-1970]

[Devices subject to this condition: D42]

H. Applicable Rules

H23.1 This equipment is subject to the applicable requirements of the following rules or regulations:

| Contaminant | Rule | Rule/Subpart |
|-------------|---------------|--------------|
| ROG | District Rule | 1122 |

[RULE 1122, 7-11-1997]

[Devices subject to this condition: D42]



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FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

H23.5 This equipment is subject to the applicable requirements of the following rules or regulations:

| Contaminant | Rule | Rule/Subpart |
|-------------|------------------|--------------|
| NOX | 40CFR60, SUBPART | IIII |

[40CFR 60 Subpart IIII, 7-7-2016]

[Devices subject to this condition: D42]

K. Record Keeping/Reporting

K40.2 The operator shall provide to the District a source test report in accordance with the following specifications:

Source test results shall be submitted to the District no later than 60 days after the source test was conducted.

Emission data shall be expressed in terms of mass rate (lbs/hr). In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.

Source test results shall also include engine fuel, exhaust gas rate, and engine and generator output under which the test was conducted.

In addition, NOx emission data shall be expressed in terms of lbs/MW-hr

Emission data shall be expressed in terms of concentration (ppmv), corrected to 15 percent oxygen, dry basis.

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FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 2005, 4-9-1999; RULE 2005, 4-20-2001]

[Devices subject to this condition: D42]

K171.1 The operator shall provide to the District the following items:

Final invoices for all work performed on Unit 15 as part of the zero time overhaul and replacement of the crankcase, including engine overhaul parts and labor, generator set refurbishment, factory testing, labor/per diem, removal and transportation, and new radiator costs. The information shall be provided within 60 days of completion of all work performed on the Unit 15.

[40CFR 60 Subpart A, 6-3-2016]

[Devices subject to this condition: D42]

- (ii) the control equipment filter media shall be returned and re-installed within 10 working days from the date of removal;
- (iii) the owner or operator shall maintain records indicating the date(s) the control equipment filter media was removed for cleaning and the date(s) the filter media was re-installed. Records shall be retained pursuant to the requirements specified in subparagraph (d)(7)(C).
- (4) New Stationary Prime Diesel-Fueled CI Engines that Have a Rated Brake Horsepower of Greater than 50 (> 50 bhp)

As of January 1, 2005, except as provided in subdivision (h), no person shall sell, purchase, offer for sale, or lease for use in the South Coast Air Quality Management District a new stationary prime diesel-fueled CI engine (>50 bhp) unless it meets the following applicable emission standards, and no person shall operate any new stationary prime diesel-fueled CI engine (>50 bhp) unless it meets all of the following emission standards and operational requirements:

(A) Diesel PM Standard

All new stationary prime diesel-fueled CI engines (> 50 bhp) shall either emit diesel PM at a rate that is less than or equal to 0.01 grams diesel PM per brake-horsepower-hour (g/bhp-hr) or shall meet the diesel PM standard, as specified in the Off-Road Compression Ignition Engine Standards for off-road engines with the same maximum rated power (Title 13, CCR, Section 2423), in effect on the date of acquisition or submittal, as defined in subdivision (b), whichever is more stringent;

- (B) HC, NOx, NMHC + NOx, and CO Standards All new stationary prime diesel-fueled CI engines (> 50 bhp) shall meet the applicable emission standards specified in South Coast Air Quality Management District Rule 1110.2 – Emissions From Gaseous and Liquid-Fueled Engines.
- (5) Emission Standards for In-Use Stationary Prime Diesel-Fueled CI Engines that Have a Rated Brake Horsepower of Greater than 50 (>50 bhp) Except as provided in subdivision (h), all in-use stationary prime dieselfueled CI engines (> 50 bhp) operated in the South Coast Air Quality